2003 Annual Report to the Legislature and the California Integrated Waste Management Board Senate Bill 876 Waste and Used Tires

Purpose

This report was prepared in accordance with Section 20 of Chapter 838, Statutes of 1999 (Senate Bill (SB) 876, Escutia), which amends and adds numerous sections to the Public Resources Code including Section 42889.3, which states:

> On or before January 1 of each year, the Department of Transportation shall report to the Legislature and the board on the use of waste tires in transportation and civil engineering projects during the previous five years, including, but not limited to, the approximate number of tires used every year, and the types and location of these projects.

Background

According to the California Integrated Waste Management Board (Board), consumers in California generate nearly 34 million waste tires and import another one and a half million waste tires from other states annually. Of these tires, roughly 25 million were diverted from landfills through recycling, reusing, retreading, and as tire-derived fuel. Without significant expansion of the existing markets for waste tire usage such as rubberized asphalt concrete, playground mats or other surfacing, civil engineering applications, and tire derived fuels, the tire stockpile (both legal and illegal) and the environmental issues they pose will continue to grow.

Department's Efforts

The California Department of Transportation (Department) has established a variety of uses for recycled content tire products for civil engineering applications in our transportation projects. The Department is committed to help reduce the number of waste tires entering California's landfills by aggressively pursuing innovative uses for these tires. Although Rubberized Asphalt Concrete (RAC) is viewed by many as the main avenue to aid in this effort, the Department is pursuing other uses that consume larger quantities of waste tires. Shredded waste tires show promise to the Department for using large quantities of waste tires in engineering applications.

The Department has used waste tires in RAC on many projects, see Appendix 1. RAC is an alternative to conventional asphalt concrete in that it incorporates crumb rubber from waste tires in the process.

In addition to RAC, the use of tires as a fuel supplement in cement kilns and cogeneration facilities constitutes a large market for waste tires, both nationally and in California. For example, of the 34 million waste tires generated in 2002, approximately five million were used as Tire Derived Fuel (TDF) in various cement kilns in California. These kilns produce cement, which is used to manufacture concrete the Department incorporates into many of its construction projects. The Department's use in this area has decreased relative to previous years due to the reduction of large construction projects in the program. It should also be noted that the concrete used on a project is credited to the year in which the contract is awarded, even though the construction of the project may span multiple years.

Waste Tires Used in Department of Transportation Projects				
Year	**Number of Tires Used in RAC Projects[1]**	**Number of Tires Used as Lightweight Fill[1]**	**Number of Tire Used as TDF[3]**	**Totals**
1999	777,389		123,000	900,389
2000	2,698,778		126,000	2,824,778
2001	1,178,953	660,000[4]	126,000	1,964,953
2002	478,791		150,000	628,791
2003	700,000[2]	75,000[5]	50,000	825,000
Subtotal	5,833,911	735,000	575,000	**7,143,911**

[1] Based on projects listed in Appendix 1.

[2] Actual quantity through third quarter is 671,661 tires with an estimated amount of 700,000 tires projected through the end of the calendar year.

[3] Based on the Board's "California Waste Tire Generation, Diversion, and Disposal, 1990 – 2001" summary, which states the total number of tires used as Tire Derived Fuel (TDF) in cement kilns in California as follows: 1999 – 4.1 million tires; 2000 – 4.2 million tires; 2001- 4.2 million tires; 2002 5.0 million tires; 2003 5.0 million tires (projected). These values were then multiplied by the Department's 3 percent share of the market in years 1999 – 2002 and 1 percent share of the market in year 2003 to determine the number of tires used as TDF.

[4] This amount represents one pilot project, which utilized a new and innovative use of tire shreds as lightweight fill. If this installation continues to perform as anticipated, proving that this is a good engineering use of tires, then this experimental application can be adopted as a standard tool. Additional pilot projects are being aggressively pursued.

[5] Similar to footnote 4, this is another experimental use of tires as lightweight fill behind a retaining wall.

The Department has worked in partnership with the Board on projects that promote the innovative use of shredded waste tires in highway construction. In

2001, the Department constructed an embankment made of lightweight fill from shredded waste tires on the Dixon Landing Project in Santa Clara County. This year, the Department installed tire shreds as lightweight backfill material behind a retaining wall on Route 91 in Riverside County. This pilot allows the Department to perform a full-scale test of a tire shred installation to measure the anticipated reduced lateral pressure on the retaining wall. Reductions in pressure on the retaining wall related to the use of tire shreds may allow for a significant reduction in the retaining wall mass in future designs, potentially reducing retaining wall costs. The retaining wall test section is 260 feet in length and will utilize approximately 75,000 shredded tires. A similar installation of lightweight backfill using tire shreds is being designed for another retaining wall in Riverside County near the junction of Routes 60, 91, and 215. Installation of the tire shreds for this project is anticipated in 2005 and preliminary estimates indicate that roughly 150,000 tires will be used.

Most recently, the Department and the Board have finalized an agreement where the Department will conduct further research to potentially increase and broaden the use of rubberized asphalt concrete in the Department's projects. The research will help to identify cost-effective applications for rubberized asphalt concrete, evaluate the feasibility of recycling reclaimed rubberized asphalt concrete into newly placed pavement and for product deployment through statewide training and partnering with industry.

Notice is directed to the values listed in the table above for the years 2000 and 2001. The increased use of RAC in these years is reflective of the special allocation of funds by the California Transportation Commission to the Department to expedite much needed roadway rehabilitation work. This additional work consisted of all types of pavement rehabilitation including but not limited to the placement of concrete pavement, conventional asphalt concrete pavement and RAC.

Since the year 2000, the Department's usage of waste tires in RAC projects has decreased. This is not due to a lack of desire to use RAC, but rather due to the significant reductions in funding. Appendix 2 shows the trends for the various pavement types constructed. It is encouraging to note that although concrete pavement and asphalt pavement show dramatic decreases in use, RAC is holding relatively steady.

Summary

The Department continues to help reduce the number of waste tires entering California's landfills. The Department has promoted the use of rubberized asphalt

concrete as roadway pavement and is continually looking for new or innovative uses of recycled waste tires for our transportation projects.

The Department's use of RAC is largely dependent upon the available funding in the State Highway Operational Protection Plan (SHOPP) for pavement projects. Although the current availability of funding will reduce the number of RAC projects that will be constructed this year as well as in the next few years, the Department will continue to optimize the use of RAC.

It should be noted that there has been a substantial increase in the investment of State and Federal funds on local roads. The combined funding from the local share of the State Transportation Improvement Program (STIP), congestion relief programs, and gas tax revenue amount to over $2 billion annually for local transportation projects. Although the Department cannot accurately quantify the use of RAC on local roads, it is a pavement strategy currently used by many local agencies.

The Department is dedicated to the stewardship of our natural resources and will continue to look for opportunities for innovative uses of recycled products in our transportation projects.

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION		TONNES	TIRES
041R3404	04-Nap-128-8.2/11.8	4/28/1999	RUBBERIZED ASPHALT CONCRETE (TYPE O)		1,400	2,590
04173744	04-Son-116-56.5, 58.6/63.2	11/16/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		6,560	12,136
06427604	06-Ker-14, 58-Var	4/21/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		4,220	7,807
06421104	06-Ker-14-0.0/24.0	8/17/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		16,000	29,600
06422104	06-Ker-155-R0.0/R17.7	8/17/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		13,300	24,605
06413104	06-Tul,Fre-201,168,198-Var	2/17/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		13,900	25,715
06411404	06-Tul,Mad-43,41-0.0/15.3,57.2/61.0	5/12/1999	RUBBERIZED ASPHALT CONCRETE (TYPE O)		3,230	5,976
06401504	06-Tul-65-8.3/22.5	7/14/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		24,800	45,880
07142404	07-LA,Ora-22-0.0/2.4,0.0/0.5	2/4/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		8,150	15,078
101A4614	10-Mer-140-60.2/80.9	6/9/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		29,600	54,760
101A0904	10-Mpa-49-0.5/29.8	4/20/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		22,300	41,255
101A4504	10-SJ,Sta,Cal-4-Var	7/28/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		45,200	83,620
10279604	10-SJ-26-1.8/24.0;24.6/33.0	9/21/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		41,000	75,850
101A4404	10-Sta,SJ-99-Var	6/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		33,500	61,975
10401704	10-Sta-120-18.0/T29.3	11/16/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		17,100	31,635
11228304	11-Imp-115-15.4/34.1	7/29/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		25,400	46,990
11400904	11-Imp-78-0.0/21.2	3/11/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		33,020	61,087
11176504	11-SD-209-10.6/12.4	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		3,620	6,697
112215U4	11-SD-5,163-R26.1/R27.2,1.1/1.5,1.5/2.1	6/17/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,230	4,126
11228604	11-SD-5-KP R80.6/R87.5	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		950	1,758
11211714	11-SD-5-R1.9/R10.1	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,350	2,498
11211724	11-SD-5-R17.4/R22.7	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		900	1,665
11217004	11-SD-75-28.0/30.5	5/20/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		5,250	9,713
11221404	11-SD-75-30.4/31.7	4/8/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		3,910	7,234
112151U4	11-SD-78-44.4/93.5	2/4/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		44,800	82,880
11229604	11-SD-78-N28.5/T31.2	12/9/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		7,600	14,060
11173504	11-SD-8-13.4/13.8, 15.6	4/22/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,060	1,961
12066914	12-Ora-1-15.8,18.4	8/26/1999	RUBBERIZED ASPHALT CONCRETE (TYPE G-MB)		9,860	18,241
				TOTAL	420,210	777,389
02372304	02-Sha-299-96.6/112.7	9/6/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		14,700	27,195
02359804	02-Sha-44-R0.0/R12.1	11/21/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		38,200	70,670
02367404	02-Sha-5-R37.0/R45.4	11/8/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		46,800	86,580
030A5104	03-Gle-45-27.7/37.3	4/4/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)		3,640	6,734
030A7814	03-Sac-99-28.3/34.7	10/17/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)		13,900	25,715
040C3804	04-Ala-13-6.9/15.4	7/25/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		25,100	46,435
040C3904	04-Ala-61-R24.1/28.9	8/2/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		15,000	27,750
040C5304	04-Ala-84-R5.2/R9.7	8/15/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		14,000	25,900
04045034	04-Ala-92-3.7/10.3	4/18/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		21,000	38,850
040C4204	04-CC-580-0.0/10.0	8/23/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		50,000	92,500
040C2904	04-Mrn-101-30.4/37.2	8/2/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		13,490	24,957

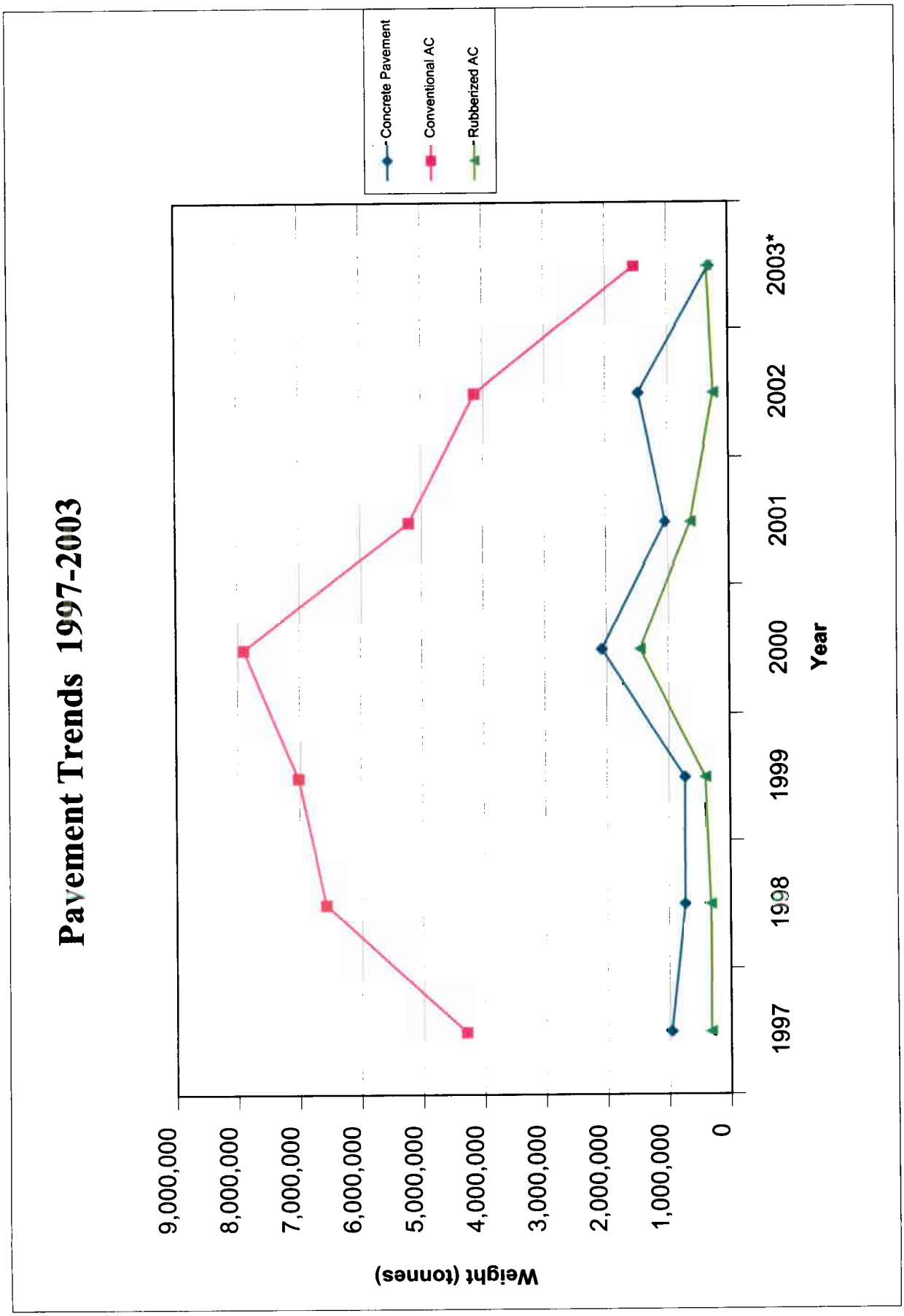
Appendix 1

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION	TONNES	TIRES
040C6304	04-Nap-121-10.6/15.1	8/1/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	6,500	12,025
040C4604	04-Nap-221-0.0/4.3	8/2/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	14,520	26,862
04172604	04-SCl-237-12.1/13.7	8/23/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	12,300	22,755
040C2704	04-Sol-780-1.1/11.9	9/19/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	31,600	58,460
040C2704	04-Sol-780-1.1/11.9	9/19/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	1,070	1,980
040C3404	04-Son-1-0.0/13.5	8/9/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	17,300	32,005
040C4704	04-Son-12-17.7/R25.7	7/18/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,450	8,233
040C4804	04-Son-37-0.5/3.2	8/8/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	12,024	22,244
04-285514	04-SCl-880-16.5/16.8	6/30/2000	SHREDDED TIRES AS LIGHT WEIGHT FILL		660,000
050C5704	05-SCr,SBt-129-L0.0/16.1,0.0/R4.2	9/6/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	2,000	3,700
05486804	05-SLO-229-0.0/14.8	8/23/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,400	15,540
06343294	06-Fre-180-58.9/68.4	6/6/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	15,400	28,490
06425104	06-Fre-5-0.0/80.4	4/19/2000	RUBBERIZED ASPHALT CONCRETE (TYPE 0)	5,000	9,250
06425104	06-Fre-5-0.0/80.4	4/19/2000	RUBBERIZED ASPHALT CONCRETE (TYPE 0-HB)	52,700	97,495
06421904	06-Ker-99-71.6/78.4	8/15/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	15,300	28,305
06420704	06-Kin,Tul-198-R28.8/45.5, 0.0/4.8	8/15/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	40,100	74,185
06420804	06-Tul,Kin-43-15.3/36.5,0.0/2.1	10/24/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	33,800	62,530
06444604	06-Tul-99-0.0/40.2	11/1/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)	41,900	77,515
06444604	06-Tul-99-0.0/40.2	11/1/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	1,900	3,515
07176304	07-LA-1-0.2/10.9	6/29/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	40,200	74,370
07201104	07-LA-101-S0.0/43.8	11/2/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	94,400	174,640
07186304	07-LA-110-1.1/13.8	11/30/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,620	8,547
07199804	07-LA-1-18.7/35.3	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	55,200	102,120
07184404	07-LA-213-5.5/11.3	9/14/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,700	25,345
07199004	07-LA-47,103,103U-Var	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,550	6,568
07209004	07-LA-5,14-R72.3/R73.3,R39.9R50.2	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,000	14,800
07203304	07-LA-5-37.9/46.2	9/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	41,500	76,775
07142904	07-LA-5-R99.3/R100.7	11/16/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	1,690	3,127
07182904	07-LA-66-4.1/8.6	3/9/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	18,300	33,855
071384U4	07-LA-710-10.7/15.5	12/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	9,500	17,575
071384U4	07-LA-710-10.7/15.5	12/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	110	204
074E5204	07-Ven-101-6.3/37.2	6/8/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	8,060	14,911
07202804	07-Ven-118-R38.2/R52.5	9/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	37,700	69,745
074G2504	07-Ven-126,150-19.2/19.6,54.9/55.4	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	2,040	3,774
07115344	07-Ven-34-6.9/10.1	4/20/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	3,270	6,050
08484404	08-Riv,SBd-62-11.1/14.9, 0.0/1.3	8/31/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	10,500	19,425
08496404	08-Riv-15-53.5/61.5	9/28/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	13,800	25,530
08495104	08-SBd-40-R4.8/R24.1&R117.5 /R143.2	9/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)	34,100	63,085
08495004	08-SBd-58-0.0/8.5	8/3/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)	4,080	7,548
09302804	09-Mno-395-122.2/135.7,171.1/173.8	6/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)	8,000	14,800
10279104	10-Ama-49-2.1/4.5	7/18/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	4,010	7,419
101A4704	10-Cal-49-R33.0/49.6	5/17/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)	14,600	27,010
10484904	10-Mer-33-R26.0/R27.3	8/22/2000	RUBBERIZED ASPHALT CONCRETE (TYPE D)	1,740	3,219

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION		TONNES	TIRES
100E2804	10-SJ-99-30.6/35.1	4/12/2000	RUBBERIZED ASPHALT CONCRETE (TYPE O)		7,900	14,615
100A9004	10-Sta-132-27.0/45.1	4/11/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		27,000	49,950
100A7204	10-Tuo-49-29.9/36.7	3/21/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		5,500	10,175
11217804	11-Imp-111-R11.6/T13.0	9/21/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		8,400	15,540
11229404	11-Imp-115-34.1/56.6	8/24/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		33,000	61,050
11072704	11-Imp-78, 86, 111-21.2-34.0, 33.2-34.2, 35.6-36.1	10/5/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		35,105	64,944
11228404	11-Imp-86-R0.0/R9.2	8/10/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		10,400	19,240
11237204	11-Imp-8-R16.2/R66.0	9/14/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		175,000	323,750
11076504	11-SD- 8-0.8 / 1.9	4/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		3,310	6,124
11237804	11-SD-008-R98.6/R107.8	11/30/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		38,000	70,300
11075104	11-SD-15,78-Var	1/27/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,590	2,942
11066904	11-SD-15-M43.1/R49.6	5/11/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		400	740
11236104	11-SD-209-8.5/10.6	6/22/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		8,200	15,170
11075004	11-SD-5,15,94-Var	1/13/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,500	2,775
11077104	11-SD-78-9.2/18.8	2/3/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		20,500	37,925
11072604	11-SD-94-62.6/105.2	2/24/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		39,200	72,520
11176404	11-SD-94-T27.5/R28.6	9/14/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,130	2,091
120940U4	12-Ora-1-38.2/41.7	11/16/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		13,400	24,790
120296A4	12-Ora-90-0.8/4.1, 8.1/13.0	9/7/2000	RUBBERIZED ASPHALT CONCRETE (TYPE G)		24,500	45,325
				TOTAL	1,458,799	3,358,778
03-2a8604	03-Sac-51-13.0/14.3	8/7/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,310	4,274
03-4416U4	03-Sac,ED-50-19.4/37.2,0.0/1.2	1/30/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		3,180	5,883
03-4416U4	03-Sac,ED-50-19.4/37.2,0.0/1.2	1/30/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)		42,700	78,995
04-045024	04-Ala-92-3.7/4.3	5/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		320	592
04-0C7014	04-Ala-880-3.7/24.6	1/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		121,000	223,850
04-0C7024	04-Ala-880-24.6/44.5	1/3/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		134,000	247,900
04-0t0504	04-Sol-80-0.9/6.4	6/20/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		7,540	13,949
04-135994	04-SM-280-R0.0/R9.0	12/4/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB)		10,300	19,055
04-1r7504	04-Ala-238-20.3/23.0	4/10/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)		5,000	9,250
04-253714	04-SCl,Ala-680-M11.9/M15.9,M0.0/R18.5	4/11/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		5,000	9,250
04-2r0104	04-Ala-84-32.8/37.3	5/22/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		3,290	6,087
05-0A4404	05-SLO-46-R0.2/R 17.4	2/27/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		31,600	58,460
05-0e7204	05-SLO-41-18.4/25.3	5/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)		5,200	9,620
05-486704	05-SLO-46-R17.4/R34.9	5/9/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		18,400	34,040
06-453604	06-Kln,Fre-33,198-12.9/20.1,19.8/33.9	2/28/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		10,300	19,055
07-182804	07-Ven-126-20.9/26.8	5/17/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		19,900	36,815
07-1y0304	07-LA-5-94.7/96.2	4/19/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,610	2,979
07-1y0804	07-LA-30-R0.0/R3.8	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,840	3,404
07-1y1704	07-LA-138-25.8/33.8	8/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)		1,410	2,609
07-1y1904	07-LA-170,5-R24.5/R32.8,55.6/56.2	5/10/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		6,130	11,341
07-202604	07-LA-101-43.8/51.8	1/11/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		33,160	61,346

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION		TONNES	TIRES
07-207704	07-Ven-1-32.8/33.4	2/15/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		172	318
07-207804	07-LA-5-25.3/29.3	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		700	1,295
07-208204	07-LA-405-21.4/37.4	7/26/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		4,430	8,196
07-4f9604	07-LA-107-3.6/4.8	7/19/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,810	5,199
074G8904	07-LA-1-40.5/43.9	3/8/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		5,170	9,565
08-000314	08-SBd-83-10.3/15.3	1/4/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		16,000	29,600
08-0A2504	08-SBd-95,247-Var	3/8/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		23,540	43,549
08-436304	08-Riv-91-9.2-11.5	1/25/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,170	2,165
10-0A5004	10-SJ-26-3.1/3.8	11/20/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		770	1,425
10-0a6504	10-SJ-99-28.4/28.8	10/31/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		490	907
10-0E2704	10-SJ,Sta-4,99-Var	10/2/2001	RUBBERIZED ASPHALT CONCRETE (TYPE O)		6,580	12,173
10-3404u4	10-Tuo-108-R3.0/7.4	5/2/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		12,100	22,385
11-073404	11-SD-15-M32.3/M34.1	9/20/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		860	1,591
11-077204	11-SD-15, 54-0.9/3.7, 4.0/8.5	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		3,860	7,141
11-178504	11-SD-78-57.1/60.0	2/1/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		6,550	12,118
11-185944	11-SD-5/78-R81.8/R82.4, 0.0/1.1	8/23/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,220	4,107
11-237104	11-Imp-86-11.8/15.8	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		4,300	7,955
11-241114	11-SD-75/282-R31.5/R33.0 0.0/1.1	2/22/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		4,700	8,695
11-241124	11-SD-805,905-11.6,19.8,22.5,7.1,8.7	5/31/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		4,710	8,714
11-241134	11-SD-15-M34.9/75.3	10/11/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,680	4,958
12-0850u4	12-Ora-5,22-10.9,11.9,R1.0/R21.2	7/12/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		470	870
12-095614	12-Ora-55-R12.3/20.4	6/7/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		21,000	38,850
12-095624	12-Ora-55-20.5/ 28.0	5/24/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		39,300	72,705
12-0A0004	12-Ora-1-26.2/29.6	3/29/2001	RUBBERIZED ASPHALT CONCRETE (TYPE G)		8,500	15,725
				TOTAL	637,272	1,178,953
03-1c8104	03-Pla,Yol,Sac-5,50,51,80-Var	5/1/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)		2,400	4,440
03-2c5704	03-Nev,Sie-80-45.2/51.1, 0.0/2.6	7/24/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		29,100	53,835
03-3546U4	03-Sac,Pla-80,51,244-M14.6/28.9,0.0/1.1,13.7,0.2	4/9/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		5,795	10,721
03-3546U4	03-Sac,Pla-80,51,244-M14.6/28.9,0.0/1.1,13.7,0.2	4/9/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)		16,400	30,340
06-465104	06-Tul-65-35.2/47.6	2/26/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O-HB) (WARRANTY)		12,200	22,570
06-474904	06-Fre-168-19.6/29.9, T41.0/T52.9	10/30/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		13,400	24,790
06-478004	06-Ker-46-82.4/93.0	10/22/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)		7,720	14,282
07-105484	07-Ven-150-24.4/38.6	5/30/2002	RUBBERIZED ASPHALT CONCRETE (WARRANTY)		21,800	40,330
07-142204	07-LA-72-0.0/11.0	6/13/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		21,600	39,960
07-181604	07-LA-91-R22.5/R33.4	8/1/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		270	500
07-189704	07-LA-170-16.2/17.4	1/10/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,830	3,386
07-1y1604	07-LA-118-R12.1/R13.4	11/7/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,140	3,959
07-1y2904	07-LA-110-32.2/35.6	6/6/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		70	130
07-4h4304	07-LA-10S-40.0/41.0	3/21/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,100	2,035
08-1A6104	08-Riv-10-R215.7/R231.9	8/22/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		35,300	65,305
08-428164	08-Riv-86/111/195-3.8/27.8,29.6/40.2,0.3/10.6	7/25/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		41,400	76,590

CONTRACT NUMBER	DIST/COUNTY/ROUTE/PM	BID OPEN	ITEM DESCRIPTION		TONNES	TIRES
10-0g6504	10-Mer-33,140-R0.0/R9.0;0.3/18.9	4/23/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)		2,260	4,181
10-0h7304	10-Ama,Mer-49, 99-23.7/28.3, 0.0/3.9	3/26/2002	RUBBERIZED ASPHALT CONCRETE (TYPE O)		5,200	9,620
12-029824	12-Ora-405-18.2/27.4	2/21/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		6,920	12,802
12-094104	12-Ora-57-18.1/36.3	2/21/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		18,500	34,225
12-0e5804	12-Ora-90-3.6	11/21/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1	2
12-1072u4	12-Ora-133-6.7/13.0	11/7/2002	RUBBERIZED ASPHALT CONCRETE (TYPE G)		13,400	24,790
				TOTAL	258,806	478,791
02-258504	02-Las-395-19.0/39.9	3/18/2003	RUBBERIZED ASPHALT CONCRETE (WARR)		23,616	43,690
04-1R9404	04-Ala-61-30.1/31.9	4/30/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,100	3,885
04-2285U4	04-CC-680-25.1/39.1	1/8/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		31,900	59,015
06-385504	06-Fre-33-111.8/133.7	8/19/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		4,860	8,991
06-445204	06-Fre-198-5.3/19.8	5/20/2003	RUBBERIZED ASPHALT CONCRETE (TYPE O)		6,170	11,415
06-492704	06-Mad-41-5.2/11.2	9/9/2003	RUBBERIZED ASPHALT CONCRETE (TYPE O)		4,960	9,176
07-1257U4	07-LA-57,60-R5.2/R7.3□R36.1/R40.0	2/27/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		470	870
07-1Y0204	07-LA-5-60.2/68.7	5/15/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		5,100	9,435
07-1Y0604	07-LA-14-87.4/88.0	1/9/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		890	1,647
07-1Y2204	07-LA-210-R40.6/R74.6	5/22/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		12,200	22,570
07-1Y3804	07-Ven-126-27.7/33.1	5/15/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		3,120	5,772
07-1Y3804	07-Ven-126-27.7/33.1	5/15/2003	RUBBERIZED ASPHALT CONCRETE (TYPE O)		5,500	10,175
08-1A0304	08-SBd-83-R 0.0/4.4	4/3/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		5,420	10,027
08-358434	08-SBd-38-16.3/24.0	8/28/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		13,900	25,715
10-0A5804	10-Mer-140-43.4/48.6	1/29/2003	RUBBERIZED ASPHALT CONCRETE (WARR)		6,804	12,587
10-0G6304	10-Mer,SJ-59, 99, 120-Var	4/29/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		3,590	6,642
11-199364	11-Imp-111-R20.9/R35.6	5/8/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		13,200	24,420
11-230104	11-SD-75-17.7/28.0	1/9/2003	RUBBERIZED ASPHALT CONCRETE (WARR)		134,000	247,900
11-232404	11-Imp-86-43.9/44.6	1/23/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,270	4,200
11-241104	11-Imp-86-31.4/33.2 & 60.0/69.7	4/24/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		2,700	4,995
11-241154	11-SD-78-R43.1/57.1	5/1/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		1,900	3,515
11-242004	11-SD-94-R83.7/84.1	4/24/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		670	1,240
12-099414	12-Ora-405-20.3/40.3	9/18/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		550	1,018
12-0A4004	12-Ora-5-11.9/13.8	4/3/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		350	648
12-0C15u4	12-Ora-5-2.7/ 11.1	7/10/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		36,600	67,710
12-0C15u4	12-Ora-5-2.7/ 11.1	7/10/2003	RUBBERIZED ASPHALT CONCRETE (TYPE O)		24,400	45,140
12-0F1904	12-Ora-5-48.8/ 50.5	5/1/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		4,550	8,418
12-0F2004	12-Ora-39-5.3/14.2	5/29/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		11,100	20,535
12-0F6204	12-Ora-5-10.9	6/26/2003	RUBBERIZED ASPHALT CONCRETE (TYPE G)		170	315
				TOTAL	363,060	671,661



* through 3rd. quarter only